

Patent Claims

1. Partition (1) for use in the production of one or more multilayers (2) or a multilayer pressed packet (3), wherein the partition (1) can be placed as a pressing sheet in the composite of a multilayer pressed packet (3) to be produced, especially between two multilayers (2), **characterized in that** the partition (1) is implemented as a steel sheet, but not as a high-grade steel sheet, that the steel sheet – at a temperature of essentially 1800 C – possesses a tensile strength of at least $R_m \geq 500$ MPa and/or – at a temperature of essentially 1800 C – a yield strength of at least $R_{p0.2} \geq 470$ MPa.
2. Partition according to the preceding claim, **characterized in that** the steel sheet is essentially completely surface-treated.
3. Partition according to one of the preceding claims, **characterized in that** the steel sheet has a thickness of 0.3 to 0.5 mm.
4. Partition according to one of the preceding claims, **characterized in that** additionally the steel sheet has an organic, inorganic, or metallic coating (8).
5. Partition according to one of the preceding claims, **characterized in that** the metallic coating (8) is made of aluminum or copper.
6. Partition according to one of the preceding claims, **characterized in that** the organic coating (8) is applied as a lubricating agent.
7. Partition according to one of the preceding claims, **characterized in that** the lubricating agent is produced from an olefin base.
8. Partition according to one of the preceding claims, **characterized in that** the coating (8) has a thickness of at least 2 μm .
9. Partition according to one of the preceding claims, **characterized in that** at least one surface of the steel sheet is covered with a copper foil (7).

10. Partition according to one of the preceding claims, **characterized in that** the steel sheet has a tensile strength of at least $R_m \geq 690$ MPa and a yield point of at least $R_{p0.2} \geq 630$ MPa.
11. Partition according to one of the preceding claims, **characterized in that** the steel sheet (1) is comprised of an unalloyed carbon steel.
12. Partition according to claim 11, **characterized in that** the steel sheet is comprised of 0.03 to 1.2 % by weight C and 0.2 to 1.5 % by weight Mn portions.
13. Partition according to claim 12, **characterized in that** the steel sheet is comprised of 0.03 to 1.0 % by weight C and 0.2 to 0.5 % by weight Mn portions.
14. Partition according to one of claims 11 through 13, **characterized in that** the steel sheet contains slight traces of phosphorous, sulphur, aluminum, and/or silicon.
15. Partition according to one of claims 11 through 14, **characterized in that** the lubricating agent is a polymer with a polyolefin base.
16. Partition according to one of claims 11 through 15, **characterized in that** the coating (8) is implemented as a thin layer chromium plating.
17. Method for producing a partition (1) for a multilayer pressed packet (3), especially a partition (1) pursuant to one of the claims 1 through 10, wherein the partition (1) can be placed as a pressing sheet in the composite of a multilayer pressed packet (3) to be produced, especially between two multilayers (2), **characterized in that** the partition (1) is implemented as a steel sheet, but not as a high-grade steel sheet, that the steel sheet – at a temperature of essentially 1800 °C – possesses a tensile strength of at least $R_m \geq 500$ MPa and/or – at a temperature of essentially 1800 °C – a yield point of at least $R_{p0.2} \geq 470$ MPa.
18. Method according to one of the preceding claims, **characterized in that** the steel sheet is essentially completely surface-treated.
19. Method according to one of claims 17 or 18, **characterized in that** the steel sheet is produced in a thickness of 0.3 to 0.5 mm.

20. Method according to one of claims 17 through 19, **characterized in that** the steel sheet is additionally provided with an organic, inorganic, or metallic coating (8).
21. Method according to one of claims 17 through 20, **characterized in that** the steel sheet is produced with a metallic coating (8) made of aluminum or copper.
22. Method according to one of claims 17 through 21, **characterized in that** a lubricating agent is applied as the organic coating (8).
23. Method according to one of claims 17 through 22, **characterized in that** the coating (8) is produced with a thickness of at least 2 μm .
24. Method according to one of claims 17 through 23, **characterized in that** at least one surface of the steel sheet is covered with a copper foil (7).
25. Method according to one of claims 17 through 24, **characterized in that** the steel sheet is produced from such a material and treated such that the steel sheet that is produced has a tensile strength of at least $R_m \geq 690 \text{ MPa}$ and a yield point of at least $R_{p0.2} \geq 630 \text{ MPa}$.
26. Method according to one of the preceding claims, **characterized in that** the steel sheet (1) is produced from an unalloyed carbon steel.
27. Method according to claim 26, **characterized in that** the steel sheet contains 0.03 to 1.2 % by weight C and 0.2 to 1.5 % by weight Mn portions.
28. Method according to claim 27, **characterized in that** the steel sheet contains 0.03 to 0.1 % by weight C and 0.2 to 0.5 % by weight Mn portions.
29. Method according to one of claims 26 through 28, **characterized in that** the steel sheet contains slight traces of phosphorous, sulphur, aluminum, and/or silicon.
30. Method according to one of claims 26 through 29, **characterized in that** the lubricating agent is a polymer with a polyolefin base.

31. Method according to one of claims 26 through 30, **characterized in that** the coating (8) is implemented as a thin layer chromium plating.
32. Method for producing a multilayer pressed packet (3), wherein a partition (1) can be placed as a pressing sheet in the composite of a multilayer pressed packet (3) to be produced, especially between two multilayers (2), **characterized in that** a partition (1) in accordance with one of claims 1 through 16 and/or a partition (1) produced in accordance with claims 17 through 31 is used.
33. Multilayer pressed packet (3) for the production of one or more multilayers (2), **characterized in that** at least one partition (1) in accordance with one of claims 1 through 16 is inserted within the multilayer pressed packet (3).

List of Reference Numbers

1	Partition
1a	Upper partition
1b	Lower partition
1c	Middle partition
2	Multilayer
3	Multilayer pressed packet
4	Pressing plate
5	Pressing tool
6	Pressing pad
7	Copper foil
8	Coating